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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/957,046	09/20/2001	Young-Hoon Joo	5000-1-211	3172
33942	7590	04/05/2006	EXAMINER	
CHA & REITER, LLC 210 ROUTE 4 EAST STE 103 PARAMUS, NJ 07652			LEUNG, CHRISTINA Y	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

09/957,046

Applicant(s)

JOO ET AL.

Examiner

Christina Y. Leung

Art Unit

2613

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 02 March 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

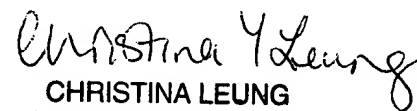
11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☐ Other: _____.

Continuation of 11. does NOT place the application in condition for allowance because: Applicants' arguments filed 02 March 2006 have been fully considered but are not persuasive. Examiner respectfully maintains the rejections of the final Office Action.

With respect to the interleaver and deinterleaver elements, it is well understood in the art that the difference between the optical couplers already disclosed by Kai et al. and the recited interleaver and deinterleaver is that the couplers disclosed by Kai et al. generally combine and separate optical signals having different wavelengths, while an interleaver and deinterleaver would similarly combine and separate wavelengths except the inputs of an interleaver and the outputs of the corresponding deinterleaver would be divided differently (i.e., odd and even wavelength channels, versus two groups of adjacent/consecutive wavelength channels). Examiner respectfully maintains that Kai et al. already generally disclose combining and separating channels as recited in the claims, but Kai et al. only do not specifically disclose how the wavelengths are ordered in the process. Gilles suggests dividing the wavelength channels such that they are interleaved rather than distinguished by consecutive groups. They also specifically teach interleaving/deinterleaving elements in the form of routing elements 3 and 6 in Figure 1, and 40 and 41 in Figure 4. See the final Office Action for further details.

Further regarding Applicants' arguments with respect to claims 13-16 and Sharma et al, Examiner notes that Applicants' have cited "col. 2, line 58-62" of Sharma et al., but Examiner respectfully maintains that Sharma et al. teach that bi-directional work signals and bi-directional protection signals, like those in the system described by Kai et al. in view of Giles, may be either transmitted on a plurality of separate fibers between nodes, or all together on single fibers. See column 9, lines 26-39.

Further regarding Applicants' arguments with respect to claims 13-16 and Liu, Examiner's rejection proposes a system comprising the work fibers 60a and 60b of Kai et al. without the protection fibers 60c and 60d (as suggested by Liu; see final Office Action for details). Examiner respectfully disagrees with Applicants' assertion that the work fibers 60a and 60b disclosed by Kai et al. would not result in Applicants' recited invention. Examiner respectfully notes that Applicants' claim 13 recites that the WDM node is connected "to an immediately-next WDM node of said system by a single optical fiber and to an immediately-former WDM node of system by another single optical fiber." In other words, Applicants' claim recites one fiber on one side of the WDM node, and another fiber on the other side of the node. Examiner respectfully maintains that fibers 60a and 60b disclosed by Kai et al. are similarly situated on either side of a WDM node.


CHRISTINA LEUNG
PRIMARY EXAMINER